

T-chart for Aerobic Cellular Respiration

Phase	How	* Why
Glycolysis	<p>Glucose is in the cytoplasm</p> <p>Glucose gets phosphorylated twice using ATP</p> <p>Glucose splits into 2 G3P's (3C)</p> <p>Redox reaction happens involving G3P + NAD⁺</p> $\text{NAD}^+ + \text{H}^+ + \text{e}^- \rightarrow \text{NADH}$ <p>G3P gets changed into pyruvate 2 ATP per G3P get made</p> <p>Overall, one glucose produces 2 pyruvate + 2 NADH + 2 ATP</p>	<p>No oxygen is required at this point.</p> <p>Makes the molecule unstable so it breaks up easier.</p> <p>Need to break up glucose in order to release stored energy.</p> <p>NADH is storing some of the free energy from G3P — to be released later in the E.T.C.</p> <p>Released energy is used to make ATP.</p> <p>We broke a 6C glucose into 2 3C pyruvates. Released E was used to make NADH + ATP.</p>